

<b>Notice of Allowability</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	09/914,240		BOTTREAU ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Shawn S. An		2613	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 8/17/2005.
2. ☒ The allowed claim(s) is/are 1 and 3.
3. ☒ The drawings filed on 24 August 2001 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |   |
|---|---|
| <ol style="list-style-type: none"> <li>1. <input type="checkbox"/> Notice of References Cited (PTO-892)</li> <li>2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br/>Paper No./Mail Date _____</li> <li>4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br/>of Biological Material</li> </ol> | <ol style="list-style-type: none"> <li>5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)</li> <li>6. <input type="checkbox"/> Interview Summary (PTO-413),<br/>Paper No./Mail Date _____</li> <li>7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment</li> <li>8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance</li> <li>9. <input type="checkbox"/> Other _____</li> </ol> |
|---|---|

**EXAMINER'S AMENDMENT**

1. An Examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to Applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

**IN THE CLAIMS:**

A) Please cancel claim 2.

**REMARKS:**

Claim 2 has been canceled as discussed above, as authorized by Applicants' attorney, Russell Gross, on August 25, 2005.



**SHAWN AN  
PRIMARY EXAMINER**

### **Reasons for Allowance**

1. The following is an Examiner's statement of reasons for allowance.

**Claims 1 and 3** recite novel features of a scalable video encoder and method comprising, for allowing a progressive transmission of information:

a base layer circuit for receiving an input stream of video images and generating compressed base layer video data for transmission to a video decoder;

at least an enhancement layer circuit generating enhancement layer video data associated with the compressed base layer video data for transmission to the video decoder, wherein the encoder is configured for encoding based on a triangular mesh representation to which a matching pursuit error coding step is specifically adapted, wherein the encoding comprising the acts of:

receiving a couple of reference and current images N-1 and N and a coarse mesh and encoding by means of a matching pursuit method the error residual image E1 between the current image N and an associated motion compensated image Nc1, thereby forming a base layer;

receiving the current image and a reconstructed image Nc'1 obtained by adding to the motion compensated image Nc1 and the motion residual image reconstructed from the coded error residual image E1, and generating from the difference between the current image and the reconstructed image Nc'1, a new error residual image E'1 used to refine the current level mesh "Mesh 1" towards a new mesh "Mesh 2" then taken as input for a further level, the information concerning the mesh distortion being contained in motion vectors Mvi containing only new nodes at each level i thereby forming a first enhancement layer; and

forming at least another enhancement layer by performing respective receiving and generating operations;

wherein the matching pursuit method being applied during each of the acts to the error residual image Ei in view of the transmission of image texture information in the form of atoms.

Art Unit: 2613

The prior art of records fail to anticipate or make obvious the novel features (greater emphasis added on underlined limitations) as discussed above.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Conclusion***

2. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to *Shawn S. An* whose telephone number is 571-272-7324.
3. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Please note a new fax number.
4. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**SHAWN AN  
PRIMARY EXAMINER**

8/25/05